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APPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/632,289		08/01/2003	Samuel Pearlman	PU 010211 CIP	5075
24498	7590	11/30/2006		EXAMINER	
THOMSON LICENSING INC.				MCPHERSON, JOHN A	
PATENT OPERATIONS PO BOX 5312				ART UNIT	PAPER NUMBER
PRINCETO		3543-5312		1756	
				DATE MAILED: 11/30/2006	ζ.

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# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/632,289 Filing Date: August 01, 2003 Appellant(s): PEARLMAN ET AL.

Patricia A. Verlangieri For Appellant MAILED
NOV 3 0 2006
GROUP 1700

**EXAMINER'S ANSWER** 

This is in response to the appeal brief filed 9/7/06 appealing from the Office action mailed 8/31/05.

# (1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

## (2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

## (3) Status of Claims

The statement of the status of claims contained in the brief is correct.

## (4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

# (5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

# (6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

## (7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

## (8) Evidence Relied Upon

6,013,400

LaPeruta et al.

1-2000

EP 0 146 226

Yamazaki et al.

6-1985

## (9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

#### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-8 and 13-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,013,400 to LaPeruta et al. (LaPeruta) in view of EP 0 146 226 to Yamazaki et al. (Yamazaki). LaPeruta discloses a method of manufacturing a luminescent screen with a light absorbing matrix, comprising the steps of exposing a first photoresist through a color selection electrode to light from at least two positions located symmetrically relative to a central source position, developing the first photoresist layer, overcoating with a light absorbing material, removing the remaining

photoresist and the light absorbing material thereon to form first guardbands, and repeating the process twice more, using second and third photoresist layers and at least two asymmetrically located light source positions, to produce second and third guardbands (see the abstract and column 5, line 57 to column 7, line 51). Additionally, LaPeruta teaches utilizing a tension focus mask as the color selection electrode, wherein the tension focus mask has a similar mask pitch, strand width and slot width as in the present invention. See column 5, lines 16-45 and column 8, lines 14-29. Therefore, the color selection electrode would have a similar transmission as set forth in claim 19 (as opposed to a conventional shadow mask with an area of the openings of about 18-22% of the area of the mask, see column 1, line 62 to column 2, line 7). However, LaPeruta does not disclose additionally exposing each photoresist from an inner source position, such that each photoresist is exposed from three source positions.

Yamazaki discloses a "three light source exposure method" for forming black stripes on a panel of a cathode ray tube, wherein each of three photoresist layers are exposed from three positions, namely the reference position O (corresponding to the inner source position of the present invention) and two offset lateral positions  $Q_1$  and  $Q_2$  (see the abstract and page 5, line 31 to page 6, line 11). Furthermore, Yamazaki teaches that the "three light source method" is an improvement over a "two light source method" comprising exposing only from positions  $Q_1$  and  $Q_2$  which are laterally offset in opposite directions from the reference position O (see page 2, line 13 to page 3, line 8), because in the "two light source method" the superimposed transmission light intensity

distribution is not optimized (see Figure 3 for the "two light source method" distribution,

as compared to the "three light source method" distribution of Figure 5).

It would have been obvious to one skilled in the requisite art to utilize an additional exposure from the reference position, as taught by Yamazaki, in the process of LaPeruta because it is taught that utilizing a third exposure from the reference position provides for an optimized light intensity distribution when forming a light absorbing matrix on the faceplate of a cathode ray tube by the lift-off method.

#### (10) Response to Argument

#### Claims 1-8

Appellant argues that LaPeruta discloses a method of manufacturing a light-absorbing matrix for a cathode ray tube in which each of first, second and third guardbands are formed using only two source locations for each of first, second and third exposure steps, whereas the presently claimed invention utilizes three source locations for each exposure step. Therefore, Appellant concludes that claims 1-8 are patentable over LaPeruta.

However, it is the position of the Examiner that because claims 1-8 are not rejected over LaPeruta alone, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Claims 1-8 are rejected over LaPeruta in view of Yamazaki, wherein Yamazaki provides motivation for adding a third source

position to the method of LaPeruta, so as to optimize exposure over all of the inside surface of the panel.

Appellant argues that Yamazaki describes a method of manufacturing a light absorbing matrix for a cathode ray tube in which three equidistant source locations are used for exposing the stripes of light absorbing material, thereby teaching away from the presently claimed invention in which two source locations are asymmetrically located with respect to a third inner source position for selected exposure steps.

Therefore, Appellant concludes that claims 1-8 are patentable over Yamazaki.

However, it is the position of the Examiner that because claims 1-8 are not rejected over Yamazaki alone, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Claims 1-8 are rejected over LaPeruta in view of Yamazaki, wherein LaPeruta discloses a process utilizing asymmetrically located source positions for selected exposure steps.

Furthermore, Appellant argues that since LaPeruta discloses using only two source locations for each exposure and Yamazaki discloses using three equidistant source locations, the combination of these references does not describe the method recited in claims 1-8, which comprises utilizing three asymmetrically located sources for selected exposure steps.

However, it is the position of the Examiner that LaPeruta discloses the invention as presently claimed, except for the use of a third source at an inner position.

Yamazaki teaches that a "three light source exposure method" comprising the addition of a third source at a reference position (corresponding to the inner source position of the present invention) is an improvement over a "two light source method" comprising exposing only from laterally offset positions, because providing the third source at the reference position provides for an optimized light intensity distribution over the entire surface of the panel (e.g. see the abstract). Therefore, the presently claimed invention is unpatentable over the combination of these references.

#### <u>Claims 13-17</u>

Appellant's arguments with respect to claims 13-17 are substantially the same as set forth for claims 1-8. Specifically, Appellant argues that LaPeruta discloses using only two source locations for each exposure, therefore claims 13-17 are patentable over LaPeruta; Yamazaki discloses using three equidistant source locations, therefore claims 13-17 are patentable over Yamazaki; and furthermore since LaPeruta discloses using only two source locations for each exposure and Yamazaki discloses using three equidistant source locations, the combination of these references does not describe the method recited in claims 13-17.

However, it is the position of the Examiner that these arguments are not persuasive for the reasons set forth above with respect to claims 1-8. Specifically, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references, and Yamazaki provides motivation for

providing a third exposure source at the reference position in the method of LaPeruta, thereby arriving at the presently claimed invention.

#### Claim 18

Appellant's arguments with respect to claim 18 are substantially the same as set forth for claims 1-8. Specifically, Appellant argues that LaPeruta discloses using only two source locations for each exposure, therefore claim 18 is patentable over LaPeruta; Yamazaki discloses using three equidistant source locations, therefore claim 18 is patentable over Yamazaki; and furthermore since LaPeruta discloses using only two source locations for each exposure and Yamazaki discloses using three equidistant source locations, the combination of these references does not describe the method recited in claim 18.

However, it is the position of the Examiner that these arguments are not persuasive for the reasons set forth above with respect to claims 1-8. Specifically, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references, and Yamazaki provides motivation for providing a third exposure source at the reference position in the method of LaPeruta, thereby arriving at the presently claimed invention.

#### Claim 19

Appellant's arguments with respect to claim 19 are substantially the same as set forth for claims 1-8. Specifically, Appellant argues that LaPeruta discloses using only

two source locations for each exposure, therefore claim 19 is patentable over LaPeruta; Yamazaki discloses using three equidistant source locations, therefore claim 19 is patentable over Yamazaki; and furthermore since LaPeruta discloses using only two source locations for each exposure and Yamazaki discloses using three equidistant source locations, the combination of these references does not describe the method recited in claim 19.

However, it is the position of the Examiner that these arguments are not persuasive for the reasons set forth above with respect to claims 1-8. Specifically, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references, and Yamazaki provides motivation for providing a third exposure source at the reference position in the method of LaPeruta, thereby arriving at the presently claimed invention.

#### Claim 20

Appellant's arguments with respect to claim 20 are substantially the same as set forth for claims 1-8. Specifically, Appellant argues that LaPeruta discloses using only two source locations for each exposure, therefore claim 20 is patentable over LaPeruta; Yamazaki discloses using three equidistant source locations, therefore claim 20 is patentable over Yamazaki; and furthermore since LaPeruta discloses using only two source locations for each exposure and Yamazaki discloses using three equidistant source locations, the combination of these references does not describe the method recited in claim 20.

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However, it is the position of the Examiner that these arguments are not

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persuasive for the reasons set forth above with respect to claims 1-8. Specifically, one

cannot show nonobviousness by attacking references individually where the rejections

are based on combinations of references, and Yamazaki provides motivation for

providing a third exposure source at the reference position in the method of LaPeruta.

thereby arriving at the presently claimed invention.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the

Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

John A. McPherson

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